Comprehensive Sample Siting Plan (CSSP) - Set up Page

Date Submitted
Date Approved

Upon Approval, all sampling must be conducted according to this plan. In the future, should updates and edits be necessary, Utility must re-submit updated plan to EPA for approval, prior to sampling.

All submittals should be electronic, via email, using this format.

Public Water System Name	Polacca
Public Water System ID#	90400106
Classification:	Community
Population Served:	2600

The technical assistance provider is:	Nick Silides
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Email:	nsilides@rcac.org

The Water System Operator is:	Alphonso Sakeva, Jr.
Phone:	(928) 737-2670
Email:	asakevajr@yahoo.com

The EPA Program Manager is:	Emmanuelle Rapivavoli
Phone:	(415) 972-3969
Email:	rapicavoli.emmanuelle@epa.gov

Primary Laboratory:	Mohave / NTUA
The laboratory contact is:	Sheila Poff/ Raquel Whitehorse
Phone:	(928) 754-8101/ (928) 729-5721
Email:	sheila@mohavelabs.com / ntua.com

1/20/2017
1/20/2017

Active Source ID#s	Source Names	Source Feeds Active Entry Point ID#s	Entry Point Names
GW001	West Well	EP001	Entry Point 1
GW002	East Well	EP002	Entry Point 2

Sources which feed Entry Points which feed Distribution Systems

By correctly designating the Active Sources and which Entry Points and which Distribution Systems they feed, Representative Sample Plans under the Groundwater Rule (GWR) are easily defined.

Entry Points Feed Distribution system ID#
DS001
DS002

Community
Non-Transient Non-Community
Transient Non-Community

Polacca, #90400106

Date of Plan: 1/20/2017

Monitoring Requirements

Updated monitoring schedules are generally provided at least annually, and may be obtained by request by contacting:

Emmanuelle Rapivavoli at (415) 972-3969 or email to rapicavoli.emmanuelle@epa.gov

Reporting to EPA - Any sample results collected under RTCR and DBPR must be reported to EPA by the 10th of the month following the month in which they were collected (or by the 10th day after the end of the monitoring period, whichever is sooner). Please email results to datamanager@epa.gov and to rapicavoli.emmanuelle@epa.gov

Distribution System Monitoring Program

Revised Total Coliform Rule (RTCR) – Under the RTCR, routine coliform samples (label "routine") are required each month, rotating through established sample sites each month to achieve representative water quality results throughout the system over the course of a year. This is based on population served. See the attached map, site list and rotation schedule.

Ground Water Rule (GWR) – Under the GWR this system will conduct "triggered monitoring," collecting source (raw) water samples at all active wells, prior to treatment, in addition to the usual repeat sampling done when a routine sample result is positive (label GWR). See "Follow-up Actions…" below for details on this.

Follow-up Actions in the Event of Positive Results - In the event one or more routine sample results are positive several follow up actions are triggered depending on whether the result(s) is(are) positive for (1)Total Coliform (TC positive only), or for (2) E. Coli (EC) positive samples. Any positive routine result of either type requires an immediate response. Follow the steps indicated below for either of these two scenarios. Any questions about protocol should be directed to Emmanuelle Rapivavoli at (415) 972-3969 or email to rapicavoli.emmanuelle@epa.gov

TC Positive Routine (Indicator Organism) – If Utility receives notification of TC positive routine sample(s); within 24 hours take the following steps:
(a) Collect 3 Repeat samples for each TC positive at the following locations:
(i) One at the original positive site location (label "repeat)
(ii) One upstream and one downstream, each within 5 service connections (label "repeat")
(iii) Additional samples to be analyzed for E. coli are required at all active well sites, prior to any treatment or disinfection (Label "GWR").

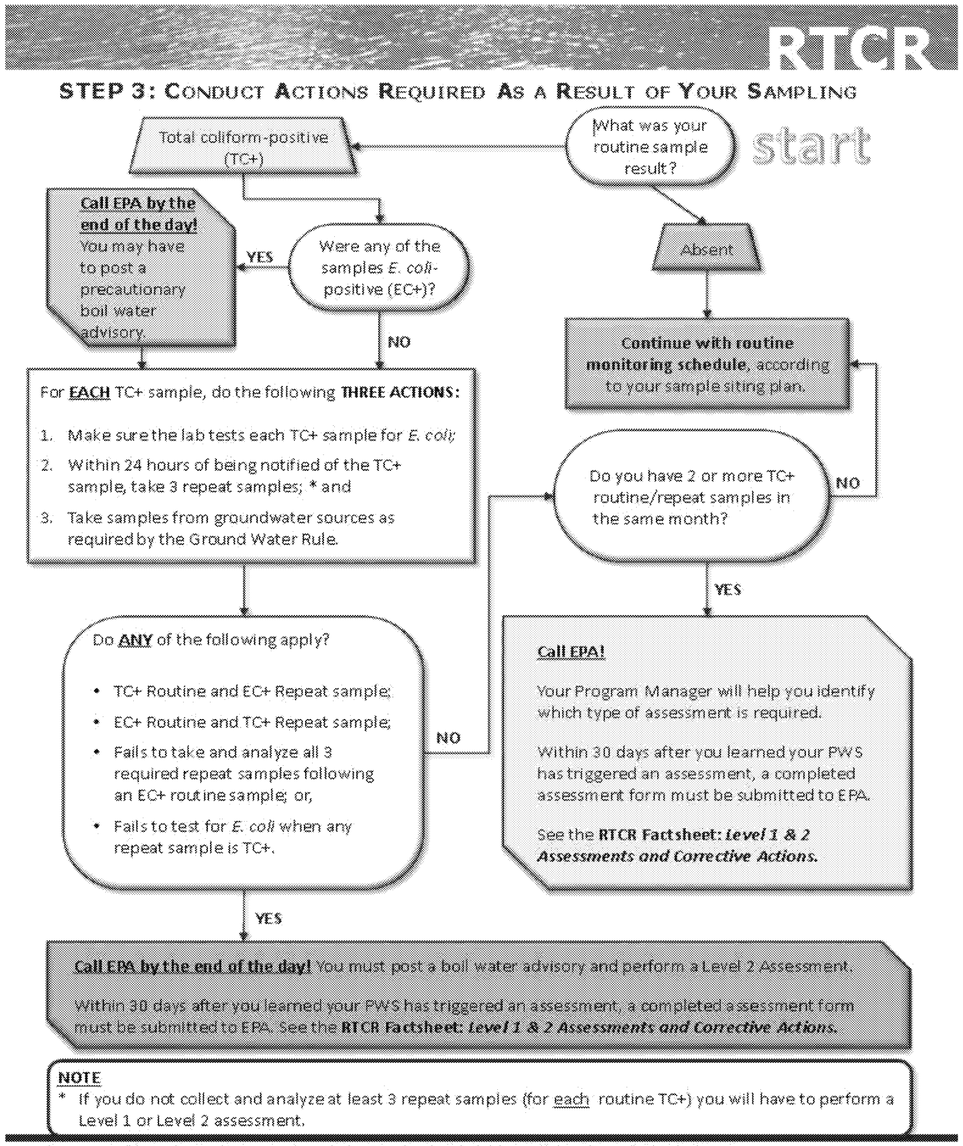
If any repeats are positive, or two or more routine samples are TC positive, complete a Level 1 Assessment (to be requested from EPA) and submit to EPA within 30 days of TC positive result. (If well site samples are negative for E. coli, eliminate well sites and continue to collect all repeats within the distribution system.) Additional samples may be recommended to determine if the problem has been identified and resolved.
Be sure to seek assistance from EPA or an approved Technical Assistance Provider if you have any questions about how to troubleshoot the system or conduct repeat tests, Level 1 Assessments or public notice requirements.

E. Coli (EC) Positive Routine (Acute Contaminant!) - If the Utility receives notification from the lab of positive E. Coli (EC) sample(s) (lab required to speak with a live person); Contact EPA by the close of business the same day.
If no answer, press '0' to speak to a live person.
Emmanuelle Rapivavoli at (415) 972-3969 or email to rapicavoli.emmanuelle@epa.gov
As soon as possible, but no later than 24 hours, take the following steps:
(a) Collect 3 Repeat samples for each EC and TC positive site at the following locations:
(i) One at the original positive site location (label "repeat)
(ii) One upstream and one downstream, each within 5 service connections (label "repeat")
(iii) Additional samples to be analyzed for E. coli are required at all active well sites, prior to any treatment or disinfection (Label "GWR").
(b) EPA may recommend a precautionary "Boil Water Notice" as soon as possible if multiple routine samples are EC positive.
If any repeats are TC or EC positive you must post "Boil Water Notice" within 24 hours, continue to collect repeats until a clean set of repeat results is obtained. A Level 2 assessment is then required to be completed with 30 days of the confirmed EC positive. This assessment must be done by EPA or an approved third party. Be sure to seek assistance from EPA or an approved Technical Assistance Provider if you have any questions about how to troubleshoot the system or conduct repeat tests or public notice requirements.

A second Level 1 assessment within a rolling 12-month period could also trigger a level 2 assessment.

Entry Point(s) Monitoring Program

In general each active Entry Point must be sampled, after treatment, prior to the first service connection, representative of normal operating conditions and each active source. Specific schedules and instructions are included on each updated monitoring schedule provided by EPA.



Polacca, #90400106

EXAMPLE MAP
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Overview Map

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Revised Total Coliform Rule (rTCR) and Groundwater Rule (GWR) Sampling Plan

APPROVED by EPA on :	1/20/2017

PWS NAME:	**Polacca**
PWS ID#:	**90400106**
DATE:	**January 20, 2017**

If system disinfects & is subject to DBPR, include field results for chlorine residual on Chain of Custody

LIST OF rTCR and GWR SAMPLING SITES

Dot	SITE ID	SITE NAME	Distribution ID#
●	TCR A	Hopi Health Center	DS001
●	TCR A-U	Hopi Tribal Huosing Authority	DS001
▒	TCR A-D	Walpi Housing Maintenance	DS001
●	TCR A-RWS	GW001, GW002	DS001
●	TCR B	FMCV Administration Building	DS001
●	TCR B-U	Mr. Hyeoma Residence	DS001
▒	TCR B-D	Walpi Village Administration	DS001
●	TCR B-RWS	GW001, GW002	DS001
●	TCR C	Circle M Store	DS002
●	TCR C-U	Nelson Yestewa Residence	DS002
▒	TCR C-D	Sharon Grover Residence	DS002
●	TCR C-RWS	GW001, GW002	DS002

TCR SAMPLE SITING ROTATION

MONTH	SITE ID#
January	TCR A, B, C
February	TCR A, B, C
March	TCR A, B, C
April	TCR A, B, C
May	TCR A, B, C
June	TCR A, B, C
July	TCR A, B, C
August	TCR A, B, C
September	TCR A, B, C
October	TCR A, B, C
November	TCR A, B, C
December	TCR A, B, C

All sample sites are sink faucets

Required Routine Samples per Month	**3**

To satisfy Triggered Source Water monitoring, Raw Water Source (RWS) samples must be taken at a sample tap at system's water well (s), prior to any treatment and with well pump running.
If there are separate distribution systems served by different sources, a representative sampling plan under the Groundwater Rule (GWR) may be indicated by specifying the RWS for each Routine site.
Please include Distribution System designation on chain of custody, if there is more than one.

Following a sample with total/fecal contamination:
Collect repeat samples within 24 hours.
Collect raw water samples from both wells,

Repeat Sampling Sites: TCR X, X-U, X-D

3 Routine Sampling Sites: TCR A, B, C

Polacca, #90400106

Site Sampling Plan Maps

CATIONS

* by Rule or
* by Geographic Area

Routine, Upstream, Downstream

Raw Water Sources (GW001, GW002, ...)

Sample Sites

Approved sample sites

Entry Point(s)

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LEAD AND COPPER SAMPLE SITING PLAN APPROVED by EPA on: 1/20/2017

PWS NAME:	Polacca
PWS ID#:	90400106
DATE:	January 20, 2017

Sampling Guidance
* Samples are taken "first draw" from taps that have been closed overnight or at least 6 hours.
* Faucet aerators should not be removed for sampling.
* Faucets should not be flushed prior to starting the 6-hour minimum stagnation period.
* Sample bottles should be wide-mouthed in order to sample at a higher flow rate.
* Try to use only faucets that are used for drinking/food preparation and faucets that have a separate hot and cold line taps with a single hot/cold line often contribute a small amount of hot water which can elevate lead and copper levels.

Samples should be made up of all available Tier 1 sites, until exhausted. Then use all available Tier 2 sites until exhausted.
Then, if more sites are needed, move to Tier 3. Use Other sites if necessary after all Tier 1,2 and 3 sites are exhausted.

Tiers	CWS	NTNCWS
Tier 1	Single family homes with copper pipe and lead solder installed after 1982 and/or has a lead service line	Buildings with copper pipes and lead solder installed after 1982 and/or has a lead service line
Tier 2	Buildings, including multi-family homes, with copper pipes and lead solder installed after 1982 and/or has a lead service line	Buildings with copper pipes and lead solder installed before 1983
Tier 3	Single family homes with copper pipes and lead solder installed before 1983.	Does not exist
Other	Sites throughout the system representing typical plumbing materials used in the system	Sites throughout the system representing typical plumbing materials used in the system

LIST OF PbCu SAMPLING SITES

Dot	SITE ID#	SITE NAME	Tier	Tier Selection Justification
※	PbCu #1	Zora Dolingyumtewa Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #2	Bruce Augah Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #3	Ada Adams Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #4	Verna Dewakuku Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #5	Marlena Huma Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #6	Wilfred Huma Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #7	Annette Fredrick Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #8	Loretta Huma Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #9	Thomas Pashano, Jr. Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #10	Lavern Chaca Residence	Tier 1	Upper Polacca Home built < 1983, Plumbing installed > 1983
※	PbCu #11	Sharon Grover Residence	Tier 1	Single family home, built after 1982
※	PbCu #12	Circle M Store	Tier 2	Building, after 1982
※	PbCu #13	Mary Ruth Shephard Residence	Tier 1	Single family home, built after 1982
※	PbCu #14	Yvonne Abieta Residence	Tier 1	Single family home, built after 1982
※	PbCu #15	Angelina Joseph Residence	Tier 1	Single family home, built after 1982
※	PbCu #16	FMCV Office Building	Tier 2	Building, after 1982
※	PbCu #17	Alphonso Sekeva Residence	Tier 3	Single family home, built before 1983
※	PbCu #18	Mary Qotswisima Residence	Tier 3	Single family home, built before 1983
※	PbCu #19	Hopi Health Care	Tier 2	Building, after 1982
※	PbCu #20	Walpi Housing Maintenance	Tier 2	Building, after 1982

Utility Reasoning for not choosing Tier 1, Tier 2 or Tier 3 (in that priority order) if they were present:

Are there lead service lines present in the distribution? ***Unknown*** (Yes, No, or Unknown)

Provide Lead Service Line documentation available:

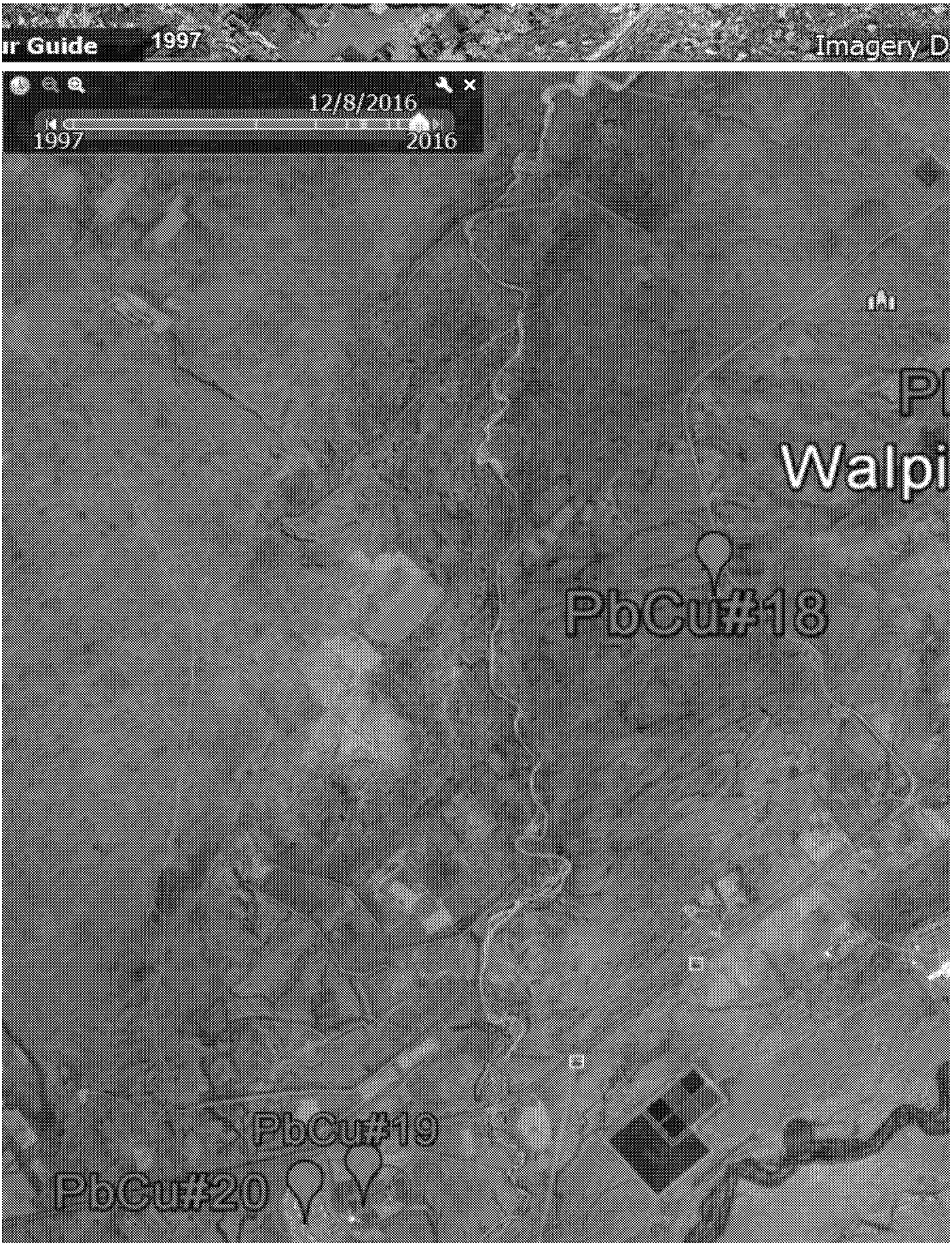
N/A

Yes
No
Unk

Polacca, PWS# 090400106

PbCu Site Sampling Plan Maps


PbCu#6
PbCu#5
PbCu#2
PbCu#3
PbCu#4
Cu#8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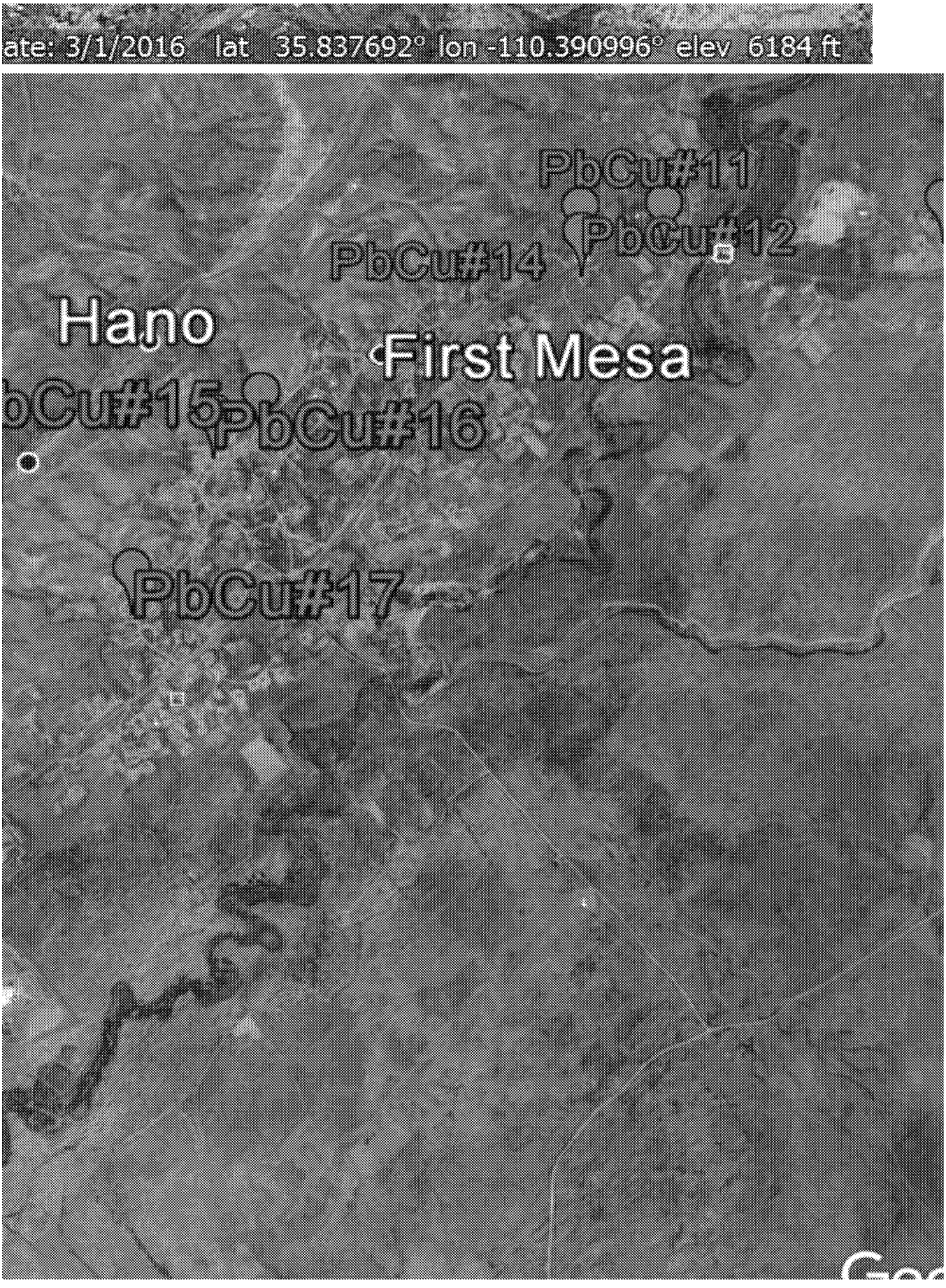
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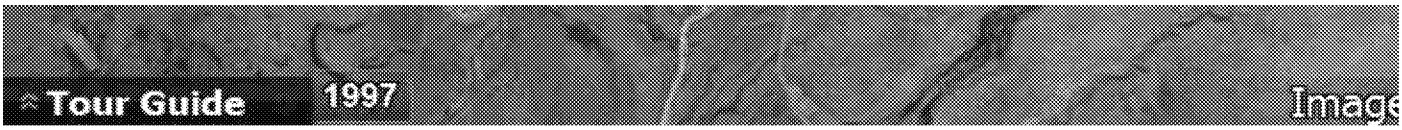
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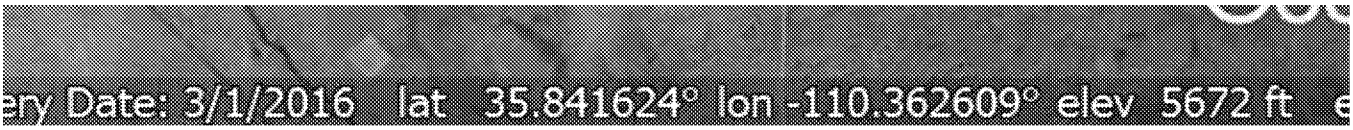
ery Date: 3/1/2016 lat 35.841624° lon -110.362609° elev 5672 ft


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Disinfection By-Products Rule and Chemical Rules	
PWS NAME:	Polacca
PWS ID#:	90400106
DATE:	January 20, 2017

APPROVED by EPA on :	1/11/2017

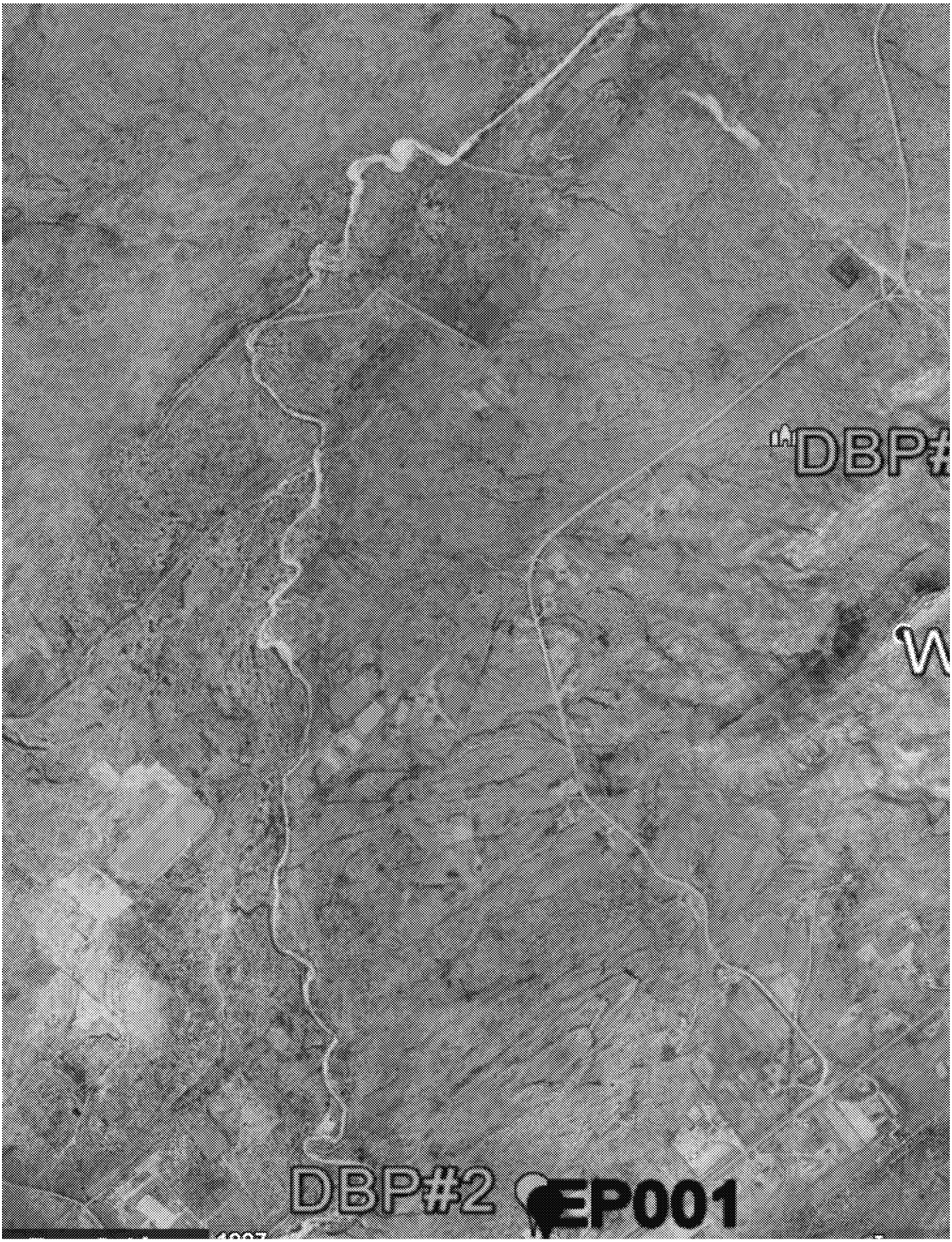
Stage 2 DBPR SAMPLING SITES		
Dot	SITE ID	SITE NAME
●	DBP#1	Circle M Store Kitchen Sink
●	DBP#2	Rose Namoki Kitchen Sink
●	DBP#3	Ponsi Hall Men's RR
●	DBP#4	Walpi Elderly Center Kitchen Sink

Peak Month (annual or 3-year)	e.g. August
Peak Months (quarterly)	e.g. August, November, February, May

Don't forget to report field results for chlorine residual with each TCR result on Chain of Custody

Samples are to be taken from EP001 & EP002 (after treatment), representative of each source which feeds into EP001 & EP002 while both well pumps are running.

Nitrate/Nitrite, Sodium, Radionuclides, IOCs, Arsenic, VOCs, Pesticides & SOCs		
Dot	SITE ID	SITE NAME
●	EP001	West Well
●	EP002	East Well


DBP#2
EP001


EP02
DBP#1
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© 2016 Google

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